

ABSTRACT OF THE DISCLOSURE

A method of manufacturing a thin film transistor that provides high electric field mobility is disclosed. The method comprising: a) forming an amorphous silicon layer and a blocking layer on an insulating substrate; b) forming a photoresist layer having first and second photoresist patterns on the blocking layer, the first and second photoresist patterns spaced apart from each other; c) etching the blocking layer using the first photoresist pattern as a mask to form first and second blocking patterns; d) reflowing the photoresist layer, so that the first and second photoresist patterns abut on each other to entirely cover the first and second blocking patterns; e) forming a metal layer over the entire surface of the insulating substrate; f) removing the photoresist layer to expose the blocking layer and an offset region between the blocking layer and the metal layer; g) crystallizing the amorphous silicon layer to form a poly silicon layer, wherein a portion of the amorphous silicon layer directly contacting the first metal layer is crystallized through a metal induced crystallization (MIC), and the remaining portion of the amorphous silicon layer is crystallized through a metal induced lateral crystallization (MILC), so that a MILC front exists on a portion of the poly silicon layer between the first and second blocking patterns; h) etching the poly silicon layer using the first and second blocking patterns as a mask to form first and second semiconductor layers and to remove the MILC front; and i) removing the first and second blocking patterns.